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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/812,537	03/19/2001	Vladimir Matena	SUNMP002B	2572

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EXAMINER

DELGADO, MICHAEL A

ART UNIT	PAPER NUMBER
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2144

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/812,537	Applicant(s) MATENA ET AL.	
	Examiner Michael S. A. Delgado	Art Unit 2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/31/2005 has been entered.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 and 10-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,167,427 by Rabinovich et al in view of US Patent Application No.2002/0078213 by Chang et al.

In claim 1, Rabinovich teaches about a method for load balancing, the method comprising (Abstract)

executing an application having a first service module "x" and a control module "Replication service", wherein the control module includes application-specific policies (policy

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specific to loading) for the application (Col 4, lines 55-67) (Col 6, lines 15-20) (Col 6, lines 40-50) ;

sensing a utilization of system resources “Monitoring” (Col 4, lines 40-50);

generating a second service module “xp”, using the first service module, the generating of the second service module being based on the application-specific policies, in response to the sensed utilization of system resources (Col 4, lines 55-67) (Col 6, lines 40-50);

transferring a state of the first service module to the second service module (Col 4, lines 55-67) (Col 12, lines 15-30); and (In order to insure that the mapping has the new changes the state of the first has to be migrated to the second)

terminating the first service module (Col 4, lines 55-67) (Col 12, lines 15-30). (This is the process of migration)

but does not explicitly teach about the application being implemented within an object oriented JAVA base environment.

Rabinovich teaches about managing network resource in order that clients can be better served in highly loaded server applications (Abstract). In Chang, the advantage of using an object oriented JAVA base environment is disclosed (Paragraph 52, lines 1-13). The limitation as to the underlying JAVA platform being unaltered by the JAVA code is inherent with the method, which is evident by the method being able to support independent platform and protocols (Paragraph 19, lines 1-12). With Chang’s invention, future changes in network resource can be easily accommodated, as the code is protocol independent and network-route unaware. To support protocol independence, the object (JAVA) code has to accommodate for the changes in all the different protocols without altering the protocols.

It would have been obvious at the time of the invention for some of ordinary skill to improve on Rabinovich's invention by using the object orient JAVA approach of Chang's invention in order to more readily accommodate the monitoring of future network resources with the least amount of impact .

In claim 2, Rabinovich combined with Chang, teaches about a method as recited in claim 1, wherein the operation of sensing the utilization of system resources includes polling system resources "monitoring" (Rabinovich Col 4, lines 40-50).

In claim 3, Rabinovich combined with Chang, teaches about a method as recited in claim 1, wherein the operation of sensing the utilization of system resources includes receiving notifications from system resources (Rabinovich Col 6, lines 15-20).

In claim 4, Rabinovich combined with Chang, teaches about a method as recited in claim 1, wherein the application-specific policies include a specific server on which to generate the second service module (Rabinovich Col 9, lines 15-30).

In claim 5, Rabinovich combined with Chang, teaches about a method as recited in claim 4, wherein the second service module is generated using the specific server (Rabinovich Col 9, lines 25-30).

In claim 6, Rabinovich combined with Chang, teaches about a method as recited in claim 5, wherein the specific server is selected based on the application-specific policies of the control module "QoS" (Rabinovich Col 9, lines 15-25).

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In claim 7, Rabinovich combined with Chang, teaches about an application having application-specific strategies for use in a JAVA environment, comprising (Abstract):

a plurality of service modules having functionality for the application “objects” (Rabinovich Col 4, lines 25-30); and

control module in communication with the plurality of service modules, wherein the control module includes application-specific policies for the application, the application specific policies are in a JAVA code form and the application-specific policies are provided to an underlying JAVA platform without altering the JAVA platform (Rabinovich Col 4, lines 55-67) (Rabinovich Col 6, lines 15-20) (Covered in claim 1) .

In claim 8, Rabinovich combined with Chang, teaches about an application as recited in claim 7, wherein the control module manages the service modules (Rabinovich Col 4, lines 55-67).

In claim 10, Rabinovich combined with Chang, teaches about an application as recited in claim 7, wherein the application-specific policies include application-specific load balancing policies (Rabinovich Col 6, lines 40-50).

In claim 11, Rabinovich combined with Chang, teaches about an application as recited in claim 10, wherein a first server module of the plurality of service modules is capable of moving to a second server based on the load balancing policies (Rabinovich Col 6, lines 50-60).

In claim 12, Rabinovich combined with Chang, teaches about an application as recited in claim 11, wherein the control module initiates a generation of a second service module on the second server (Rabinovich Col 7, lines 5-20).

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In claim 13, Rabinovich combined with Chang, teaches about an application as recited in claim 12, wherein a state of the first service module is transferred to the second service module (Rabinovich Col 4, lines 55-67) (Rabinovich Col 12, lines 15-30). (This is the process of migration)

In claim 14, Rabinovich combined with Chang, teaches about an application as recited in claim 13, wherein the first service module is terminated after the state of the first service module is transferred to the second service module (Rabinovich Col 4, lines 55-67) (Rabinovich Col 12, lines 15-30). (This is the process of migration)

In claim 15, Rabinovich combined with Chang, teaches about a method for moving an application within a JAVA environment, comprising the operations of (Fig 6):

executing a first service module and a control module on a first server, the control module having application-specific policies for an application, the application specific policies are in a JAVA code form and the application-specific policies are provided to an underlying JAVA platform without altering the JAVA platform (Rabinovich Col 4, lines 55-67) (Rabinovich Col 6, lines 15-20) (Covered in claim 1) ;

sending a message from the control module to an executive runtime module “offload messages”, the message requesting the executive runtime module to move the first service module to a second server (Rabinovich Col 4, lines 55-67) (Rabinovich Col 9, lines 5-15);

generating a second service module on the second server, the second service module having a state equivalent to a state of the first service module (Rabinovich Col 4, lines 55-67) (Rabinovich Col 12, lines 15-30); (This is the process of migration) and

terminating the first service module (Rabinovich Col 4, lines 55-67) (Rabinovich Col 12, lines 15-30). (This is the process of migration)

In claim 16, Rabinovich combined with Chang, teaches about a method as recited in claim 15, further comprising the operation of obtaining the state of the second service module by a direct transfer from the first service module (Rabinovich Col 12, lines 15-30).

In claim 17, Rabinovich teaches about a method as recited in claim 15, further comprising the operation of obtaining the state of the second service module by using a state server that is shared with the first service module (Rabinovich Col 14, lines 50-55) (Rabinovich Col 12, lines 15-30).

In claim 18, Rabinovich combined with Chang, teaches about a method as recited in claim 16, wherein the message from the control module to the executive runtime module includes an identity of the second server (Rabinovich Col 9, lines 5-15).

In claim 19, Rabinovich combined with Chang, teaches about a method as recited in claim 15, further comprising the operation of disabling requests to the first service module (Rabinovich Col 12, lines 15-30).

In claim 20, Rabinovich combined with Chang, teaches about a method as recited in claim 19, further comprising the operation of enabling requests to the second service module (Rabinovich Col 12, lines 15-30).

Conclusion

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3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US patent no. 6,463,454 by Rabinovich et al. teaches about a system and method for integrated load distribution and resource management on internet environment

US patent no. 6,393,459 by Lurndal. teaches about a process migration method for multicomputer system, involves issuing request for migration of processes from source site to destruction site and creating copy of process operative on destination site.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael S. A. Delgado whose telephone number is (571) 272-3926. The examiner can normally be reached on 7.30 AM - 5.30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923

. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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